REMARKS

Claims 1–20 are pending in the present application.

Claims 1 and 11 have been amended herein, including amendments were previously submitted in response to the final Office Action mailed May 28, 2004 (Paper No. 7). Since the Advisory Action mailed September 30, 2004 refused entry of those amendments without indicating a reason, Applicant's presume that the amendments were considered to raise new issues requiring further search and consideration.

Reconsideration of the claims is respectfully requested.

35 U.S.C. § 102 (Anticipation)

Claims 1–4 and 11–14 were rejected in the last Office Action under 35 U.S.C. § 102(e) or 102(b) as being anticipated by U.S. Patent No. 6,016,311 to *Gilbert et al.* This rejection is respectfully traversed.

A claim is anticipated only if each and every element is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. MPEP § 2131 at p. 2100-73 (8th ed. rev. 2 May 2004).

Independent claims 1 and 11 each recite determining a longest time duration required for downlink transmission from any of a set of modems communicating with a corresponding group of wireless access devices, from access requests received from the wireless access devices, and setting uplink/downlink frame allocation portions for all of the group of wireless access devices based upon

that longest downlink portion time duration. In the present invention, the longest downlink time duration for a set of modems each communicating with a different wireless access device is determined to prevent uplink transmission from any of those wireless access devices from commencing until all downlink transmissions have completed, thereby avoiding interference between uplink and downlink portions of TDD frames, either within a given sector or between adjacent sectors/cells. Such a feature is not found within the cited reference. The cited portion of *Gilbert et al* merely states:

> However, the base stations 106 monitor the bandwidth requirements of their respective cells 102, report results back to the cluster controller 162, and accept updates and commands from the cluster controller 162 thereby changing the uplink/downlink time slot allocations based upon the bandwidth requirements.

Gilbert et al, column 14, lines 1–6. As previously noted, *Gilbert et al* does not teach or suggest determining a longest time duration for downlink traffic requested from base station 106 by respective cells 102 within a cluster 160, or specifically the comparison of the time durations required for various requested downlink transmissions that would be necessary to make such a determination. Moreover, *Gilbert et al* does not teach setting the uplink/downlink frame allocation ratio based on the longest downlink requirement.

The Advisory Action states:

> [A]pplicant's arguments that the cited prior art does not teach determining a longest time duration for downlink transmission to avoid interference between uplink and downlink portions is not persuasive. Gilbert has been shown to clearly teach accepting updates and commands from the cluster controller thereby monitor the bandwidth requirements of their respective cells and report results back to the cluster

controller. Gilbert also teaches that the base stations cluster controller determines, from the traffic requirements as reported to it by the base stations, the uplink/downlink time slot allocations. *The time slot allocation for each device will be different depending on the bandwidth requirements* and therefore one allocation will be longer than the rest. The cluster controller must use this information to change the uplink/downlink time slot allocations. The cluster controller would not schedule an uplink and a downlink time slot at the same time, otherwise interference would occur and no communication could take place, which would defeat the purpose of Gilbert.

Paper No. 092304, page 2 (emphasis added). Applicants respectfully note that the above argument, while conceding that time slot allocations for different devices will differ due to varying bandwidth requirements, fails to take into account that the time slot allocations for different devices may be different. As such, there is no support for the conclusion that "[t]he cluster controller would not schedule an uplink and a downlink time slot at the same time" for different devices–that is, one device may have a particular time slot allocated for the uplink, while another device has the same time slot allocated for the downlink.

Regardless, nothing in *Gilbert et al* has been identified that suggests the cluster controller compares time slot allocations and/or bandwidth requirements for different devices, a necessary step in determining the longest time duration requirement for a downlink portion as recited in the claims, and as opposed to one downlink allocation merely being longer without determining which is the longest.

Moreover, *Gilbert et al* fails to teach setting the uplink/downlink allocation based on the determined longest time duration.

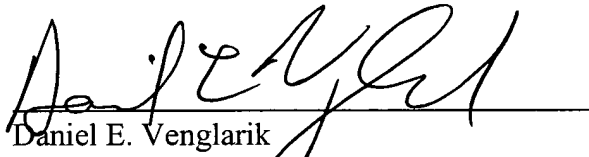Therefore, the rejection of claims 1–4 and 11–14 under 35 U.S.C. § 102 has been overcome.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *dvenglarik@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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